

DESCRIPTION OF A NEW SPECIES OF *VITRINA*, AND NEW FORMS OF HELICIDÆ, WITH A LIST OF THE HELICOID SHELLS HITHERTO FOUND IN THE CANARY ISLANDS.

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THE land-shells which Colonel G. S. Parry collected during his third visit to the Canary Islands (January to April, 1895), and several of which he has kindly placed at my disposal, are interesting, not so much on account of the new forms, since these, in view of the repeated and thorough exploration of the group, could scarcely be expected to be numerous, but chiefly because certain species were found in islands where they had hitherto been looked for in vain, and also for the discovery at San Sebastian, Gomera, of living specimens of *Hygromia multigranosa*, a species previously known only in a subfossil condition. An extended range for *Helicella phalerata*, which was believed to be confined to Tenerife, is established by the taking of specimens at Galdar, Grand Canary. Mousson recorded it for Palma, but the correctness of that habitat has been doubted; it is probable, however, that the species had already been collected in Grand Canary by Wollaston, for his variety *umbilicata* from that island, regarded by him as pertaining to *H. persimilis*, appears to Colonel Parry and myself to be identical with *H. phalerata*.

The new records referred to are: *Vitrina Canariensis*, Mouss., Gomera (one specimen); *Hyalinia cellaria*, Müll., Palma; *Helicella conspurcata*, Drap., Palma; *H. phalerata*, W. and B., Grand Canary; *H. Despreauxii*, D'Orb., Palma. The finding of *Pyramidula scutula*, Shutt, in Tenerife, is of interest, from the fact that Mousson and Wollaston regarded it as a doubtful member of the fauna.

Colonel Parry's shells included a *Vitrina*, which I describe as a new species, and four varieties of Helicidæ, which appear to be worthy of distinctive names.

VITRINA PARRYI, n.sp.

Testa depressa, transverse oblonga, tenuis, corneo-virens, nitidissima; spira plana; sutura linearis, distincte marginata; anfr. 3, celeriter accrescentes, ultimus ample dilatatus, superne valide gibbosocaliculata; apertura perobliqua; peristoma simplex, acutum. Diam. maj. 8, min. 5.5, alt. 3 mm.

Hab.—Galdar, Grand Canary.

Its nearest ally appears to be *V. Blauneri*, from which it differs in being smaller and in having pronounced gibbous grooves on the upper side. Colonel Parry informs me that the animal is jet-black, while in *V. Blauneri* it is pale-brown mottled with darker brown.

HELICELLA TUMULORUM var. *PULCHRA*, n.var.

Differt a typo, fasciis fuscis fere nigris ornata, subtus validius costulata. Diam. maj. 13.5, min. 12, alt. 9 mm.

Hab.—Isleta, Grand Canary.

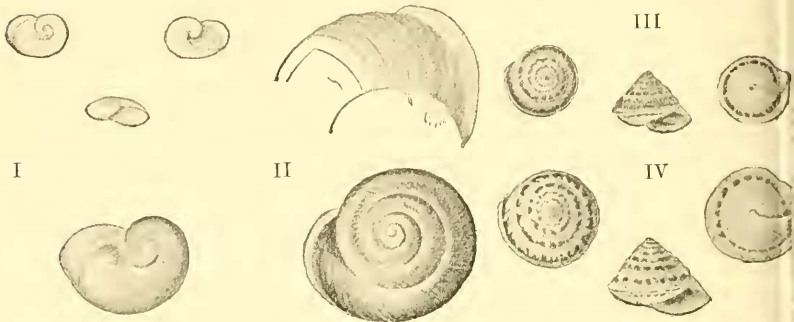
Differs from the type in having darker, almost black bands, one below, one above the periphery, and in being more strongly and coarsely ribbed below.

HELICELLA TUMULORUM var. *ARUCASENSIS*, n.var.

Differt a typo testa minore, magis elevata, fasciis minus interruptis, apertura latiore. Diam. maj. 10·5–11·5, min. 9·5–10·5, alt. 7·5–8·5 mm.

Hab.—Arucas, Grand Canary.

Differs from the type in being smaller, more elevated, in the fasciæ being less interrupted and less sharply defined, and in the



I. *Vitrina Parryi*, n.sp.

II. *Helix Pouchet* var. *geminata*, n., and portion of whorl. $\times 2$.

III. *Helicella tumulorum* var. *arucasensis*, n.

IV. *Helicella tumulorum* var. *pulchra*, n.

aperture being wider. It approaches *II. phalerata* in contour, from which, however, it is separated by the acute, compressed keel. The specimens were found at the top of a volcanic cone, near Arucas, at an altitude of 1200 feet.

HEMICYCLA BITUMINOSA var. *UNICOLOR*, n.var.

Differt a typo testa unicolore, ad peripheriam magis angulata, apertura latiore.

Hab.—Valley of Galdar, Grand Canary.

Differs from the type in being of a unicolorous, corneous brown, in being more strongly angulated at the periphery, and in having a wider aperture. This variety was found with the type in the proportion of 1 in 3, "in an isolated locality under one fig-tree."

HEMICYCLA POUCHET var. *GEMINATA*, n.var.

Differt a typo testa tenuiore, sine fasciis, costulis geminatis.

Hab.—Santa Cruz, Tenerife.

The paired costulae and the smooth alternate interstices give this variety a totally different appearance from the type; its general aspect rather recalls *II. plicaria*. It was taken by Colonel Parry with the type in 1893, but it appears rather scarce, for a suite of about fifty yielded only two specimens.

CLASSIFIED LIST OF THE SPECIES OF HELICOID LAND-SHELLS
FROM THE CANARY ISLANDS.

Since the publication of Wollaston's "Testacea Atlantica" in 1878, many new species have been discovered; and, since the descriptions are scattered through various publications, I have thought it useful to append a classified list of all the Helicoid land-shells now known to be comprised in the fauna. With regard to the species of *Hemicycla*, Pilsbry's classification appears to me to be hardly satisfactory, and it is notorious that some of Mabile's species are based upon insufficient characters. I have therefore endeavoured to rearrange the genus, and have found it necessary to reduce certain of the species to varietal rank, or to sink them as synonyms.

The shells taken by Colonel Parry during his visits to the Islands in 1887, 1893, and 1895 are marked with an asterisk. A † implies that the species is subfossil; while the islands are designated as follows:—

C. Grand Canary.	Gr. Graciosa.	P. Palma.
F. Fuerteventura.	H. Hierro.	T. Tenerife.
G. Gomera.	L. Lanzarote.	

VITRINA, DRAP.

- Lamarckii*, Fér.—*T. P. H.
= *Teneriffæ*, Quoy.
- Canariensis*, MOUSS.—H. *G.
(? P. T.).
- latebasis*, MOUSS.—*P. H.
- Blanneri*, SHUTT.—*T. P. *C.
- Parryi*, n.sp.—*C.
- reticulata*, MOUSS.—*T.

HYALINA, FÉR.

- Sect. VITREA, FITZ.
- crystallina*, MÜLL.—F. *T.
P. H.
- vermiculum*, LOWE.—*T.
- Sect. POLITA.
- cellaria*, MÜLL.—*T. H. *C. *P.
— var. *Canariæ*, MOUSS.
—C.
- themera*, MAB.—C.
- festinans*, SHUTT.—P.
- Osoriensis*, WOLL.—C.
- Sect. NAUTILINUS.
- Clymene*, SHUTT.—*T.
- Sect. LYRODISCUS, PILS.
- = *Lyra*, MOUSS.
- circumsessa*, SHUTT.—*T. P.
- Rochebruni*, MAB.—G.
- lenis*, SHUTT.—*P. H.

JANULUS, LOWE.

- Pompylia*, SHUTT.—P.

PYRAMIDULA, FITZ.

- Sect. PATULASTRA, PFR.
- placida*, SHUTT.—T. P. H.
= *Luseana*, PAIVA.
- = *pusilla* var. *sericina*,
Lowe.
- pusilla*, LOWE.—T. P. H.
- = *servilis*, SHUTT.
- = *hypocrita*, DOHRN.
- Sect. GONYODISCUS, FITZ.
- = *Discus*, FITZ. et Auct.
- textilis*, SHUTT.—P. T.
- kompsa*, MAB.—H.
- = *concinna*, LOWE.
- putrescens*, LOWE.—P.
- ganoda*, MAB.—G.
- Garachioensis*, WOLL.—T.
- = *agrestis*, LOWE.
- var. *submarmorata*, WOLL.
- engonata*, SHUTT.—T.
- retecta*, SHUTT.—P.
- scutula*, SHUTT.—*T.
- Sect. LYRULA, WOLL.
- Loweana*, WOLL.—L.
- = *torrefacta*, LOWE.
- = *usurpans*, FURT.

LEUCOCHROA, Beck.

ultima, Mouss.—F.*pressa*, Mouss.—F.*accola*, Mouss.—F.

GEOMETRA, Swains.

Sect. HETEROSTOMA, Hartm.

paupercula, Lowe.—L.

HELICELLA.

Sect. HELIOMANES, Fér.

maritima, Drap.—F. *C. *T.= *lineata*, Oliv.= *simulata*, W. and B.= *Canariensis*, Shutt.= *herbicola*, Shutt.— var. *submeridionalis*,
Bgt.—C.

Sect. CANDIDULA, Kob.

apicina, Lam.—T.*conspurcata*, Drap.—*T. *P.

Sect. MONILEARIA, Mouss.

monilifera, Mouss.—L. F. C.
*T. G. P.*Lancercottensis*, W. and B.—
L. F. T.= *Orbiguyi* var. *calcarca*,
Mouss.— var. *Webbii*, Lowe.—
L. F.— var. *adoptata*, Mouss.—G.*Orbiguyi*, W. and B.—*T. *P.
C. L. F. H.= *Orotarana* (Tarn.), Mouss.— var. *mitigata*, Mouss.—
T.*persimilis*, Shutt.—F. C. *T.
G. *P. *H.— var. *preposita*, Mouss.—
C.— var. *deria*, Mouss.—T.*phalerata*, W. and B.—*T.
*C. (? P.).= *persimilis* var. *umbili-*
cata, Woll.= *Rosetti*, W. and B.= *Nivariensis*, Shutt.*tumulorum*, W. and B.—*C.= *atomata*, Mke., juv.— var. *pulchra*, n. var.—*C.— var. *Arucasensis*, n. var.
—*C.MONILEARIA (*continued*).*oleacea*, Shutt.—P.— var. *deusta*, Lowe.—P.*Woodwardia* (Tarn.), Mouss.
—*T.*Watsoniana*, Woll.—C. T.*lemniscata*, W. and B.—*C. P.*phryganophila*, Mab.—T.*dendrophila*, Mab.—C.*aglaomete*, Mab.—C.

Sect. JACOSTA, Gray.

Argonautula, W. and B.—C.+ var. *Canariensis*, Mouss.= *Renati*, Dautz.*pulverulenta*, Lowe.—C.*granostriata*, Mouss.—L. F.*morata*, Mouss.—†F.*multipunctata*, Mouss.—†F.

Sect. OBELUS, Hartm.

cyclodon, W. and B.*Despreauxii*, D'Orb.—C. *P.= *Preauxii*, Hartm.— var. *immodica*, Mouss.—C.*moderata*, Mouss.—L. F.*Mirandæ*, Lowe.—*G. H.— var. *nodosostrata*, Mouss.
—G.

Sect. TROCHULA, Schlüter.

inops, Mouss.—C.

Sect. COCHLICELLA, Risso.

ventricosa, Drap.—C. T.

HYGROMIA, Risso.

Sect. FRUTICICOLA, Held.

multigranosa, Mouss.—*G.
(recent).

Sect. CILIELLA, Mouss.

leprosa, Mouss.—*T.*lanosa*, Mouss.*parida*, Mouss.—T. P.= *nubigena*, Lowe.

ACANTHINULA, Beck.

spinifera, Mouss.—C. P.

VALLONIA, Risso.

pulchella, Müll.—C. *T. P.

HELICODONTA, Fér.

Sect. CARACOLLINA, Beck.

lenticula, Fér.—*C. *T. *P.

*H. G. L. F.

= *subtilis*, Lowe.= *Pintorella* (Bonelli), Villa.

CARACOLLINA (*continued*).

- lenticula* var. *viridis*, Mouss.
—F.
— var. *major*, Shutt.—*P.
hispidula, Lam.—*T. G.
— var. *subhispidula*, Mouss.
—T.
— var. *Bertheloti*, Fér.—
*T.
— var. *ereria*, Mab.—T.
pthonera, Mab.—T.
Parrji, Pons. and Sykes.—*T.
afficta, Fér.—P.
= *lens*, D'Orb.
= *planaria*, Lam.
planaria, Mouss.—T.
discobolus, Shutt.—*G.
= *afficta*, D'Orb.
fortunata, Shutt.—*T. G.
crispolanata, Woll.—P.
beata, Woll.—F.
Gomerae, Woll.—G.
eutropis, Shutt.—F.
ophthalmorica, Mab.
= *ophthalmorycha*, Mab.

LEPTAXIS, Lowe.

Sect. LAMPADIA, Alb.

cuticula, Shutt.—*T. G. P.

HELICOGENA, Fér.

aspera, Müll.—C. *P. (intro-
duced).

= *spumosa*, Lowe.

OTALA, Schum.

= *Macularia*, Auct.*lactea*, Müll.—*C. *T. H.

— var. *Canariensis*, Mouss.
—T. G. H.

atarorum, Mab.—C.

Jaquematana (Bgt.), Mab.—
C.

gibbosobasalis, Woll.—T.*Ahmarina* (Bgt.), Mab.—C.*efferrata*, Mouss.—†G.*Moussoniana*, Woll.—†G.= *Adonis*, Mouss.

HEMICYCLA, Swains.

plicaria, Lam.—*T.= *plicatula*, Lam.= *orbiculata*, Wood.= *planorbula* (Gray), Villa.HEMICYCLA (*continued*).*Bethencourtiana*, Shutt.—*T.— var. *chersa*, Mab.—T.*Berkeleyi*, Lowe.—C.*Thespesia*, Mab.*desculpta*, Mouss.—†F.*retrodens*, Mouss.—T.*modesta*, Fér.—*T.= *Pairana*, Lowe.— var. *idiotrypa*, Mab.—T.*saponacea*, Lowe.—C.*Poucheti*, Fér.—*T. (? C.).= *Adansonii*, W. and B.— var. *Hedeia*, Mab.—T.— var. *evergasta*, Mab.—T.— var. *geminata*, n. var.—*T.*thoryna*, Mab.—T.*malleata*, Fér.—*T.= *bidentalis*, Lam.= *tridentalis*, Lam.*hedonica*, Mab.—†T.*eucalypta*, Mab.—C.*bathycoma*, Mab.—C.*Nivariae*, Woll.—*T.*Justini*, Mab.—C.= *Poirieri*, Mab.*callipona*, Mab.—†T.*hellygaia*, Mab.—†T.*glyceia*, Mab.—††T.*idryta*, Mab.—†T.*zelota*, Mab.—†C.= *themera*, Mab.= *psathirella*, Mab. (Nouv.Arch., t. xv, fig. 12: not
named in text or index).*Glasiana*, Shutt.—*C.= *pellislaerti*, Rve.= *malleata*, var. β . Pfr.*thanasima*, Mab.—†T.*ephora*, Mab.—†T.*empeda*, Mab.—C.*cardiobola*, Mab.—†T.*Fritschi*, Mouss.—*G. T.— var. *major*, Mouss.—†G.*Guamartemes*, Grass.—*C.= *Guanartemes*, auct.= *Manriqueiana*, Lowe.= *Guartemes*, Mts.*distensa*, Mouss.—G.*hedybia*, Mab.—(? G.)

HEMICYCLA (*continued*).

- Maugeana*, Shutt.—T.
 = *Gaudryi*, Pfr. and Rve.
invernica, Mouss.—T.
 = *consobrina*, W. and B.
consobrina, Fér.—*T.
 — var. *retusta*, Mouss.—T.
 — var. *cacopera*, Mab.—G. C.
bathylelera, Mab.—T.
indifferens, Mouss.—*†H.
Perraudierei, Grass.—H.
Hierroënsis, Grass.—*H.
 = *ralverdensis*, Lowe.
Gaudryi, D'Orb.—*C. (? G.).
 — var. *evergeta*, Mab.—C.
 — var. *Gaudryopsis*, Mab.—C.
 — var. *Ripochi*, Mab.—C.
 — var. *ambblasmodon*, Mab.—C.
 — var. *ephedrophila*, Mab.—C. G.
ianthina, Mab.—C.
granomalleata, Woll.—*P.
vermiplicata, Woll.—P.
Verneaui, Mab.—†T.
Perrieri, Mab.—†T.
cacoplasta, Mab.—†T.
zorgia, Mab.—C.
merita, Mouss.—†G.
bituminosa, Mab.—*C.
 — var. *unicolor*, n. var.—*C.
psathyra, Lowe.—C.
 = *psathyropsis*, Mab.
Agactana, Mab.—*C.
Galdarica, Mab.—*C.
cateucta, Mab.—†C.
bathycampa, Mab.—F.
gravida, Mouss.—†F.
sarcostoma, W. and B.—*L.
 (fossil), F. *C. (? T.).
 — var. *Canariæ*, Mouss.—*C.
 — var. *thaumalea*, Mab.—L. F.
 — var. *Fuerteventuræ*, Mouss.—F.
 — var. *guanehe* (Tarn.), Mouss.—F. L.
Paeteliana, Shutt.—F.
harmonica, Mouss.—H.
Gomerensis, Morel.—G.

HEMICYCLA (*continued*).

- cacopista*, Mab.—†C.
ethelema, Mab.—C.
digna, Mouss.—†G.
Sauleyi, D'Orb.—*C.
 — var. *Ledru*, Mab.—†C.
erypsidoma, Mab.—C.
embritha, Mab.—†C.
temperata, Mouss.—*C.
stulta, Mab.—†C.
baia, Mab.—†C.
subgravida, Mab.—†T.
carta, Mab.—†C.
Barkeriana, Mab.—†C.
 = *Barkeri*, Mab.
planorbella, Lam.—G.
 = *strigata* var., Fér.
 = *Villiersii*, D'Orb.
 — var. *incisogranulata*, Mouss.—T.
inutilis, Mouss.—T.
Plutonia, Lowe.—*†L. F.
semitecta, Mouss.—†G.
Sabiniana, Mab.—C.
Paivanopsis, Mab.—G.
 = *Paivana*, Morel.
quadricincta, Morel.—*G.
 ? *examinata*, Mab.—T.
 ? *nubivaga*, Mab.—T.
 EUPARYPHA, Hartm.
Pisana, Müll.—L. *C. *T. G. P. Gr.
 — var. *Pisanella*, Serv.—C.
 — var. *geminata*, Mouss.—*F.
 = *alboranensis*, Pfr.
 — var. *clausoinflata*, Mouss.—F.
 — var. *parvula*, Mouss.—F.
 — var. *hierophanta*, Mab.—T.
 — var. *Grasseti* (Tarn.), Mouss.—*C.
 = *pisanoides*, D'Orb.
 = *planata*, W. and B. (*pars*).
impugnata, Mouss.—L. Gr.
 = *festiva*, Lowe.
 = *planata*, W. and B. (*pars*).
 — var. *subgeminata*, Mouss.—L.

DOUBTFUL AND SPURIOUS SPECIES.

Vitrina fasciolata, Fér. Quoted by Férussac from Tenerife, but not found by any subsequent naturalist.

Hyalinia (Polita) semicostulata, Beek. Reeve gives the Canaries as a habitat; but since it has never been confirmed, and since his records have frequently proved untrustworthy, it is advisable to remove this species from the list. Beek reported it originally from Portugal.

Helix marcida, Shutt.

— *melolontha*, Shutt.

— *umbicula*, Shutt.

— *cementitia*, Shutt.

— *elegantula*, Jan. (one of the many forms of *polymorpha*, a Madeiran species).

— *anaglyptica*, Rve.

= *nitidiusecula* var. *major*. Flat Deserte, Canaries (*sic*, error for Madeira).

— *teniata*, W. and B. } Two Madeiran species erroneously recorded
— *tiarella*, W. and B. } from the Canaries by Webb and Berthelot.

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¹ Cited erroneously in the Royal Society's Catalogue of Scientific Papers as vol. xxix.

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